

What is claimed is:

1. A controller for performing a vector control of an induction motor having a stator and a rotor using a rotor resistance, comprising:
 - a temperature sensor for detecting a stator temperature;
 - a table storing information on relation between the stator temperature and the rotor resistance predetermined based on measurement; and
 - a processor to obtain a value of the rotor resistance for the stator temperature detected by said temperature sensor referring said table, and to calculate a slip frequency for the vector control based on the obtained value of the rotor resistance.